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Attorney Docket No. S63.2H-9828-US01

**Amendments To The Claims:**

1. (Previously presented) A medical device comprising:

a support member, a first tubular member and a second tubular member, the first tubular member being positioned immediately adjacent to at least a portion of the support member, the second tubular member being positioned immediately adjacent to at least a portion of the first tubular member, a portion of the first tubular member being welded to a portion of the second tubular member;

the support member constructed and arranged to substantially reflect radiation at one or more frequencies absorbable by at least one of the first tubular member and second tubular member.

2. (Original) The medical device of claim 1 wherein the medical device is a catheter.  
3. (Original) The medical device of claim 2 wherein the support member is a sleeve or a coil.  
4. (Original) The medical device of claim 2 wherein the support member is made of metal.  
5. (Currently amended) A medical device comprising:

a support member, a first tubular member and a second tubular member, the first tubular member being positioned immediately adjacent to at least a portion of the support member, the second tubular member being positioned immediately adjacent to at least a portion of the first tubular member, a portion of the first tubular member being welded to a portion of the second tubular member;

the support member constructed and arranged to substantially reflect radiation at one or more frequencies absorbable by at least one of the first tubular member and second tubular member;

~~The medical device of claim 2 wherein the support member is made of a polymeric material having a melt temperature in excess of the melt temperature of the inner tube.~~

6. (Original) The medical device of claim 1 wherein the support member is made of a rigid material.  
7. (Original) The medical device of claim 1 wherein the support member is made of a flexible material.  
8. (Original) The medical device of claim 2 wherein the first tubular member comprises an inside surface and an outside surface, the support member being positioned immediately adjacent

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to the inside surface, the second tubular member being positioned immediately adjacent to the outside surface.

9. (Withdrawn) The medical device of claim 2 wherein the first tubular member comprises an inside surface and an outside surface, the support member being positioned immediately adjacent to the outside surface, the second tubular member being positioned immediately adjacent to the inside surface.

10. (Withdrawn) The medical device of claim 2 further comprising an outer tube, the support member being disposed about at least a portion of the outer tube.

11. (Withdrawn) The medical device of claim 10 wherein the first tubular member is a medical balloon.

12. (Withdrawn) The medical device of claim 11 wherein the second tubular member is a first retaining sleeve.

13. (Withdrawn) The medical device of claim 12 wherein the first retaining sleeve is welded to the medical balloon.

14. (Withdrawn) The medical device of claim 13 further comprising an inner tube, the outer tube disposed about at least a portion of the inner tube, the inner tube defining a lumen.

15. (Withdrawn) The medical device of claim 14 wherein the medical balloon has a proximal end and a distal end, the proximal end extending from the outer tube and the distal end extending from the inner tube.

16. (Withdrawn) The medical device of claim 14 wherein the catheter comprises an outer tube and an inner tube at least a portion of which is disposed within the outer tube, the support member disposed between the outer tube and the medical balloon.

17. (Original) The medical device of claim 2 wherein at least a portion of at least one of the first tubular member and the second tubular member is radiopaque.

18. (Withdrawn) The medical device of claim 13 further comprising a retraction device in mechanical communication with the first retaining sleeve, the retraction device extending to the proximal end of the medical device.

19. (Withdrawn) The medical device of claim 13 wherein at least a portion of the medical balloon defines a receiving region for an expandable medical device, the receiving region being adjacent to the first retaining sleeve, the region constructed and arranged to receive an

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expandable medical device thereabout.

20. (Withdrawn) The medical device of claim 19 wherein the expandable medical device is a stent.

21. (Withdrawn) A method of affixing a first tubular member to a second tubular member comprising the steps of:

- a) providing a support member, a first tubular member and a second tubular member;
- b) disposing at least a portion of the first tubular member about at least a portion of the support member;
- c) disposing at least a portion of the second tubular member about at least a portion of the first tubular member;
- d) directing at the first tubular member and the second tubular member sufficient radiation at a first wavelength absorbable by the first tubular member and the second tubular member, wherein the support member does not substantially absorb radiation at the first wavelength.

22. (Withdrawn) A method of affixing a retaining sleeve to a catheter comprising the steps of:

- a) providing a catheter having
  - 1) an outer shaft assembly having a sleeve receiving region;
  - 2) an inner tube extending within the outer shaft assembly, the inner tube having a proximal end and a distal end;
  - 3) an inflation lumen extending within the outer shaft assembly
  - 4) a support member disposed about the inflation lumen at the retaining sleeve receiving region of the outer shaft assembly;
- b) disposing a sleeve about at least a portion of the outer shaft assembly in the retaining sleeve receiving region;
- c) directing at the sleeve and outer shaft assembly sufficient radiation at a first wavelength absorbable by the sleeve and outer shaft to affix the sleeve to the at least a portion of the outer shaft assembly.

23. (Withdrawn) The method of claim 22 wherein the support member does not substantially absorb radiation at the first wavelength.

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24. (Withdrawn) The method of claim 23 wherein the support member substantially reflects or substantially transmits radiation at the first wavelength.
25. (Withdrawn) The method of claim 24 wherein the support member is a sleeve member.
26. (Withdrawn) The method of claim 24 wherein the support member is a coil.
27. (Withdrawn) The method of claim 24 wherein the support member of is made of metal.
28. (Withdrawn) The method of claim 24 wherein the outer shaft assembly comprises an outer tube and a medical balloon, the medical balloon disposed about at least a portion of the outer tube in the retaining sleeve receiving region and the retaining sleeve affixed to at least a portion of the medical balloon.
29. (Withdrawn) The method of claim 28 wherein the support member is disposed between the medical balloon and the outer tube.
30. (Withdrawn) The method of claim 28 wherein the outer tube has a passage therethrough and the support member is disposed in the passage.
31. (Withdrawn) The method of claim 30 wherein the support member is in the form of a region of the outer tube having a composition which differs from the composition of the remainder of the outer tube.
32. (Withdrawn) The method of claim 31 wherein regions of the outer tube adjacent to the support member are dyed and the support member is not dyed.
33. (Withdrawn) A method of laser welding a member to a tube in the production of a medical catheter comprising the steps of:
- providing a tube for use in a medical catheter, the tube having a welding region;
  - providing a first member to be welded to the tube at the welding region;
  - providing a laser operable at a laser frequency which is absorbed by the tube and by the first member;
  - providing a support member in the welding region of the tube, the support member not substantially absorbing radiation at the laser frequency; and
  - directing radiation at the first member and welding region of the tube to weld the first member to the tube.
34. (Withdrawn) The method of claim 33 wherein the support member is substantially transparent or substantially reflective at the laser frequency.

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35. (Withdrawn) The method of claim 34, the tube having a proximal end and a distal end, the tube having a balloon disposed at the distal end thereof, the first member in the form of a retaining sleeve, wherein the retaining sleeve is welded to the balloon.
36. (Withdrawn) The method of claim 33 wherein the tube is a hypotube and the first member is a manifold.
37. (Withdrawn) The method of claim 33 wherein the tube is a hypotube and the first member is a midshaft tube.
38. (Withdrawn) The method of claim 33 wherein the tube is a outer tube having a proximal end and a distal end and a port therein between the proximal end and the distal end for receiving a guidewire therein and the first member is an inner tube extending within the outer tube, the inner tube having a proximal end and a distal end, the proximal end terminating at the port.
39. (Withdrawn) The medical device of claim 1 wherein the support member is removable from the first tubular member.
40. (Withdrawn) The medical device of claim 1 wherein the support member is at least partially coated with a release agent.
41. (Withdrawn) The medical device of claim 1 wherein the support member is braided.
42. (Withdrawn) The medical device of claim 1 wherein the support member is comprised of a plurality of braids.
43. (Withdrawn) The medical device of claim 1 wherein the support member is constructed at least partially from hypotubing.
44. (Withdrawn) The medical device of claim 1 wherein the support member is comprised of a substantially flat ribbon of material.
45. (Withdrawn) The medical device of claim 4 wherein the support member is constructed by a sputtering process, the sputtering process depositing a thin layer of the metal about a portion of the first tubular member.
47. (Withdrawn) The medical device of claim 4 wherein the metal is radiopaque.
49. (Withdrawn) The medical device of claim 6 wherein the support member includes a wall surface with at least one slot therein.
50. (Withdrawn) The medical device of claim 10 wherein the support member is integral with at least a portion of the outer tube of the catheter assembly.

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51. (Withdrawn) The medical device of claim 10 wherein the support member is extruded with the outer tube of the catheter assembly.
52. (Withdrawn) The medical device of claim 50 wherein the first support member is a coil or a braid.
53. (Withdrawn) A medical device delivery system comprising:  
a catheter assembly having a first retaining sleeve receiving region and a medical device receiving region;  
an expandable medical device disposed about the medical device receiving region of the catheter assembly, the expandable medical device having a first end and a second end;  
a first retaining sleeve disposed about the first end of the expandable medical device and the catheter assembly; and  
a first support member disposed coaxially about the first retaining sleeve receiving region of the catheter assembly.
54. (Withdrawn) A medical device comprising:  
a catheter assembly having a first tubular member disposed about at least a portion of the catheter assembly; and  
a first support member positioned immediately adjacent to the first tubular member receiving region of the catheter assembly, the first support member constructed and arranged to substantially reflect or substantially transmit radiation at one or more frequencies absorbable by the first sleeve member.

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**Remarks**

This Amendment is in response to the Final Office Action dated February 4, 2004. Claims 1 – 54 are pending in this application. Claims 9 – 16 and 18 – 54 have been withdrawn from consideration. The Office Action rejected claims 1 – 4, 6, 7 and 17 under 35 USC § 103(c) over Wang et al. (US 6443980, hereinafter “Wang”) in view of Fontaine (US 5443498); rejected claim 5 under 35 USC § 103(c) over Wang in view of Fontaine and admitted prior art; and rejected claims 1 – 4, 6 – 8 and 17 under 35 USC § 102(b) over Lodin et al. (US 5460608, hereinafter “Lodin”).

By this Amendment, claim 5 is rewritten in independent form and Applicants request withdrawal of the finality of the outstanding Office Action. Reconsideration in view of the following remarks is respectfully requested.

**Claim Rejections – 35 USC § 103(c)**

The Office Action rejected claims 1 – 4, 6, 7 and 17 under 35 USC § 103(c) over Wang in view of Fontaine, and rejected claim 5 under 35 USC § 103(c) over Wang in view of Fontaine and admitted prior art. These rejections are traversed.

Applicants assert that the rejection of claims under 35 USC § 103(c) is improper because 35 USC § 103(c) does not provide a statutory basis for making claim rejections. Therefore, Applicants request withdrawal of all rejections under 35 USC § 103(c).

Applicants further assert that Wang does not qualify as a prior art reference under 35 USC § 103, as both the immediate application and Wang are commonly assigned to SciMed Life Systems, Inc. of Maple Grove, MN, and both were subject to an obligation of assignment to SciMed Life Systems at the time the invention was made.

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. 35 USC § 103(c).

Thus, Wang is not available as prior art against the immediate application under 35 USC § 103, and any such rejections applying Wang are moot.

Applicants assert that removal of the Wang reference under 35 USC § 103(c) does

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not constitute acquiescence as to the validity of any rejections under 35 USC § 103 had the reference been available.

#### **Request to Withdraw Finality of Office Action**

As discussed above, the Final Office Action dated February 4, 2004 improperly rejected claim 5 under 35 USC § 103(c) and did not provide any alternative grounds for rejection. As such, the Final Office Action has not properly addressed the disposition of all of the pending claims. Applicants therefore request withdrawal of the finality of the Office Action.

#### **Claim Rejections – 35 USC § 102**

The Office Action rejected claims 1 – 4, 6 – 8 and 17 under 35 USC § 102(b) over Lodin. These rejections are traversed.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (MPEP §2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Applicants assert that Lodin does not disclose or suggest a first tubular member and a second tubular member, "a portion of the first tubular member being welded to a portion of the second tubular member" as recited in independent claim 1.

Lodin discloses a catheter having a coaxial shaft 12 and a balloon 50. The coaxial shaft 12 includes an outer shaft 20 and an inner shaft 40. See column 4, line 67 – column 5, line 8.

Lodin does not discuss any form of securement between the inner shaft 40 and the outer shaft 20, although Lodin does disclose securement between a shaft portion and various other elements of the invention, such as a balloon 50, a marker band 80 or a reinforcing means such as a stainless steel coil 60. See column 5, line 57 – column 6, line 3. However, the method of securement disclosed is limited to using an adhesive. See, for example, column 5, lines 51 – 53. Lodin does not disclose or suggest any welding techniques or the use of welding to secure any of the elements of the catheter.

Therefore, Applicants submit that independent claim 1 is not unpatentable under 35 USC § 102 over Lodin. Claims 2 – 4, 6 – 8 and 17 depend from independent claim 1 and are



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not unpatentable for at least the reasons discussed with respect to claim 1. Accordingly, Applicants request withdrawal of the rejections under 35 USC § 102.

#### Conclusion

Based on at least the foregoing remarks, Applicants respectfully submit this application is in condition for allowance. Favorable consideration and prompt allowance of claims 1 – 8 and 17 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

VIDAS, ARRETT & STEINKRAUS

Date: 3/31, 2004

By: 

Jeremy G. Laabs  
Registration No.: 53170

6109 Blue Circle Drive, Suite 2000  
Minnetonka, MN 55343-9185  
Telephone: (952) 563-3000  
Facsimile: (952) 563-3001

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